

6.4 intro answers

p 437

#1

$$g(x) = \frac{x-2}{3} = \frac{1}{3}x - \frac{2}{3}$$

$$g(x) = 6x+1$$

$$g(x) = -\frac{2}{3}(x-4) = -\frac{2}{3}x + \frac{8}{3}$$

2. Reflect the graph over
the LINE $y=x$

3. Find the $f(g(x))$ AND $g(f(x))$
and if they BOTH equal x , then
 $f(x)$ and $g(x)$ are inverses of each
other.

Guided practice pp 438-442

$$1. f^{-1}(x) = x-4$$

$$2. f^{-1}(x) = \frac{x+1}{2} = \frac{1}{2}x + \frac{1}{2}$$

$$3. f^{-1}(x) = -\left(\frac{x-1}{3}\right) = -\frac{1}{3}x + \frac{1}{3}$$

} verify by
finding
 $f(f^{-1}(x))$
AND
 $f^{-1}(f(x))$

$$4. 48m$$

$$5. f^{-1}(x) = \sqrt[6]{x}$$

$$6. g^{-1}(x) = \sqrt[3]{x}$$

$$7. f^{-1}(x) = -\frac{5}{4}\sqrt[3]{x}$$

$$8. f^{-1}(x) = \sqrt[3]{4-x}$$

$$9. f^{-1}(x) = \sqrt[5]{\frac{x-3}{2}}$$

$$10. g^{-1}(x) = \sqrt[5]{\frac{x-7}{-7}} = \sqrt[5]{\frac{7-x}{7}}$$

$$11. t = \left(\frac{p}{10.7}\right)^{3.48}$$